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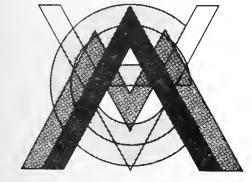
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INVESTING INTELLIGENTLY IN EDUCATIONAL EXCELLENCE

The Montana Advisory Council for Vocational Education (MACVE) is seriously interested in the well-being of Montana's educational system and economic stability. We believe that vocational education is an essential component of a comprehensive high school curriculum and vital to a strong economy. The Council is a group of twenty-three citizens who represent business, industry, labor, education, parents, disadvantaged persons, and the general public. The Council is attentive to the current local educational condition and to national reports regarding education. This paper states MACVE's position regarding the national emphasis on increasing high school graduation requirements and makes a logical case for requiring vocational education as an integral part of a comprehensive high school curriculum.

Montana's Educational Goals

Montana citizens have specific goals for our state's educational system. For example, the Montana Constitution states, "It is the goal of the people to establish a system of education which will develop the full education potential of each person." In addition, as reported by Montana's Task Force on Excellence in Education, a "basic education should be a continuing process which provides the opportunity for students to become:

- responsible individuals within communities,
- reasoning individuals,
- perceptive individuals capable of independent expression,

and to develop sufficient skills to meet their needs for:

- employment and work,
- higher education,
- continuing education,
- non-work goals and activities."2

Montana citizens want students in our state to participate in a quality educational system where standards for student performance are high, student learning is meaningful, classroom instruction is excellent, and commitment to relevant knowledge and skills is a top priority.



DID YOU REALIZE?

In 1975, 14,813 students started the 10th grade in Montana high schools.⁶

In 1976, 13,981 students started the 11th grade in Montana high schools.⁶

In 1977, 12,804 students started the 12th grade in Montana high schools.⁶

In 1978, 12,184 students graduated from Montana high schools in the spring.⁷

In 1979, 6,678 students started as freshmen in the Montana university system.8

In 1982, 3,561 students graduated from the Montana university system.8

2,629 fewer students graduated from high school in 1978 than started the 10th grade three years before. What happened to these students?

50% of the 1978 high school graduating class did not matriculate in the Montana university system. What did these students do?

50% fewer students graduated from the Montana university system in 1982 than started four years before. What happened to the 50% who did not graduate in 1982?

Investigating the Current Condition

Every society of the world has struggled with the concept and methods of education. A Nation at Risk is one of the most widely publicized reports regarding the system of schooling in the United States. This report documents the findings and recommendations of a panel of experts, convened by Secretary T. H. Bell to diagnose the problems of American education. The report recommends excellence, higher standards, and competence as several changes needed to improve our schooling system. Specifically, the report emphasizes student competence in the "New Basics." The "New Basics" are listed as: a) four years of English, b) three years of math, c) three years of science, d) three years of social studies, e) half a year of computer science. English, math, science, social studies, and computer science are important curriculum areas. Higher standards, excellence, and competence are necessary to improve the abilities of our high school graduates. The struggle Montana educators must face, however, is **how** to achieve student competence, excellence in those curriculum areas, and still make sure that each student is developing to his/her full potential with skills that can be used after high school.

A pursuit of excellence in education must go beyond the organization of a schooling system and be a part of the instructional setting. All meaningful education must be people centered, i.e., student oriented. Students must feel a need to learn and develop effective communication skills, mathematics abilities, and problem-solving capabilities. School reform and excellence in education will emerge by motivating students to learn relevant skills and knowledge in all the classes that they take each school day. Students need better individual reasons to learn specific facts and skills.

Meaningful Learning

"Learning in the context of educating is under the deliberate control of the learner." Students decide to learn or not to learn. They operate in a school environment that is saturated with instructional materials and surrounded by various networks of information. Some students simply take advantage of this environment and choose to learn. Many students, however, lack the experience to appreciate the purpose for learning. Many high school classes lack personal meaning and relevance for students. Approximately 2,000 students (on the average) drop out of Montana high schools every year. This fact illustrates the lack of relevance high school classes hold for many students.

Meaning and relevance in schooling are very important. A student must think about and ponder over information. Students must compare facts learned in school to evidence observed in the real world. Learners construct their own knowledge through experience which is individualized and personally significant. Meaningful learning allows students a chance to create, accomplish, watch, think, and solve problems. Students learn when they are required to build, to read, to interpret, to evaluate, and to compare products to predetermined criteria. Students must be provided with real life opportunities to solve problems, analyze and comprehend directions, evaluate proper application of basic skills, design, construct, and finish individual items, as well as communicate with adults. Vocational education provides this relevant type of schooling and an opportunity for each student to think. John Locke once said, "Reading only furnished the mind with materials of knowledge; it is thinking that makes what we read ours."

Vocational Education & Montana's Economy

People are the most important resource in Montana's economy. People must be prepared and able to think, work, and play in our state. For Montana's economy to grow there must be a reduction of unemployment, a favorable business climate, and an available supply of both human and non-human resources. The 'Build Montana' program initiated by Governor Schwinden and adopted by the Legislature in 1983 as House Bill 1 was a legislative effort to promote economic health and growth in our state. House Bill 1 created a Science and Technology Council that is to analyze options and plan for Montana's scientific and technical growth. One of the major focuses of the Council is technical education. This is the education of our human resources to be prepared to function within our ever-changing technical environment. Appropriate and relevant education of our human resources is the key to economic stability and/or

Postsecondary vocational-technical education in Montana is presently participating in the preparation of people to enter and/or advance in the technical areas of communication, production, health, and equipment maintenance. People who provide service and work in the technical world must be flexible, must be precise, must be able to solve problems and apply basic math and science principles in their jobs. Employees must be capable of careful situation analysis and accurate communication with supervisors, subordinates, peers, and computers.

Students who pursue technical education must have a relevant and practical educational background. High school educators, including vocational education teachers, must demand student excellence and high student performance. Administrators, parents, and students must demand educational relevance and meaningful learning activities. Montana's economic stability rests on the performance of individuals and their capacity to be productive and apply knowledge in the technical environment that surrounds us.

A Comprehensive High School Curriculum

The high school curriculum must be comprehensive, relevant, and applicable to the needs of learners. Individual needs and goals include developing work-related skills as well as developing competence in the "New Basic" skills. The needs and goals of all students should be realistically considered when a comprehensive curriculum is established, students need to develop skills and knowledge that will be valuable following high school.

The typical activities a student pursues following high school include going directly to work, joining the military, attending a postsecondary vocational-technical center, or attending college. Students need opportunities during high school that will prepare them for these pursuits and their careers. Experience in occupational career clusters while in high school helps students realize how successful application of basic skills will be an essential aspect of success following high school. VOCATIONAL EDUCATION classes provide these opportunities for students. Students participating in vocational education have the opportunity and are required to use and explain the application of science, math, and communication **principles.** In these classes students are given an opportunity to practice and to solve problems as well as to think logically.

High school vocational education includes electronics, drafting, auto mechanics, equipment repair, metalworking, merchandising/marketing, business/office skill development, data processing, personal resource management, animal/crop production, and ranch management. In order for students to accomplish, create, and function in these real life situations, they must apply basic skills. Students are motivated and find reasons to learn and understand the use of fractions, ratios, decimals, precise measurement, algebra, proper sentence structure, punctuation, grammar, biology, chemistry/physics formulas/principles, technicallywritten materials, and computer application in the real world. A comprehensive curriculum must include individualized participation in learning activities that motivate a student to pursue excellence in their own mental development. Vocational education does this.

Leaving Opportunity for High School Vocational Education

It is essential, as citizens of Montana consider the implementation of higher standards for high school graduation, that they also consider the importance of vocational education. Vocational education helps students realize why school is important. Participation in vocational education helps many students decide to pursue excellence in education and to be productive members of the workforce.

To make Montana's educational system better, we should require that all students explore the world of work and the realm of using the "New Basics" in occupational areas. Many states have taken this stance and Montana should seriously consider the positive ramifications of requiring a vocational lab sequence as a part of high school graduation. The accreditation standards already require that practical arts be offered in every high school. State standards should also require that students participate in practical application of academic skills and problem solving opportunities.

Vocational education provides student motivation, opportunities for application of basic skills, individualized learning experiences, meaningful student learning, and an introduction to the world of work. Vocational education is often considered a well-kept secret. Let us be leaders in educational excellence by placing this practical type of education high on the educational priority list throughout Montana.

The Montana Advisory Council for Vocational Education believes the role of vocational education in the high school curriculum is essential. Vocational education is a motivating educational tool. It helps prepare students for employment in an occupation or prepare them for participation in further education. Moreover, vocational education plays an important role in Montana's economic stability. The State Advisory Council for Vocational Education recommends that students be required to participate in vocational education programs to ensure excellence and relevance in Montana's educational system.

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